

FACTSheet

Former Nebraska Ordnance Plant ■ Mead, Nebraska

October 2008

For more information or any questions concerning the Mead project, please contact:

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Summary of the 2007 Containment Evaluation

In conducting the 2007 Containment Evaluation, an assessment was performed of groundwater conditions per the approved Containment Evaluation Work Plan.

The information that was evaluated as part of the assessment included:

- 2007 chemical sampling data
- Operations and maintenance from extraction well and treatment facilities
- Measured groundwater levels
- Groundwater model calculations and predictions

When determining containment, multiple lines of evidence were used, such as:

- Chemical sampling data
- Measured water levels and extraction well pumping rates
- Groundwater velocity
- Model-predicted particle tracking

Results of the 2007 Containment Evaluation

- Hydraulic data and groundwater modeling shows two areas requiring further evaluation (contamination is outside the capture zone).

- There is no imminent threat to water supplies, municipal or private - based on the 2007 sampling data and groundwater velocity.

What Triggers A Response?

According to the Final Containment Evaluation Work Plan, the following items trigger a response:

- Contamination above action levels outside of the current hydraulic capture zone.
- Site-related contaminants above action levels in perimeter monitoring wells.
- Imminent threat to a water supply.

Containment Evaluation Response

The model predictions performed, as part of the 2007 Containment Evaluation, shows 5 to 10 years before contamination actually moves past the current extraction wells in the two Areas of Concern - if no action is taken. The actions completed thus far, as well as those being implemented right now, include:

- Direct-push sampling in the Load Line 1 TCE plume north of EW-12 and EW-13.

See other side

- Completed trial and error modeling to determine if modification of pumping rates will resolve this issue.
- Completed comprehensive groundwater modeling to determine an optimal network of new and existing extraction wells. **GOALS:** Restore and maintain containment.
- Recommendations from the modeling optimization include:
 - Installation of containment wells EW-14 and EW-16 at the leading edge of the Load Line 3 RDX plume.
 - Implementation of a revised existing extraction well pumping schedule.
 - Installation of a focused extraction well (EW-15) in the northern portion of the Atlas Missile Area TCE plume.
 - Construction of a treatment plant to treat groundwater extracted from EW-15. This treatment plant will be located adjacent to the existing AOP treatment plant and will be constructed to be able to treat additional flow from potential future extraction wells.

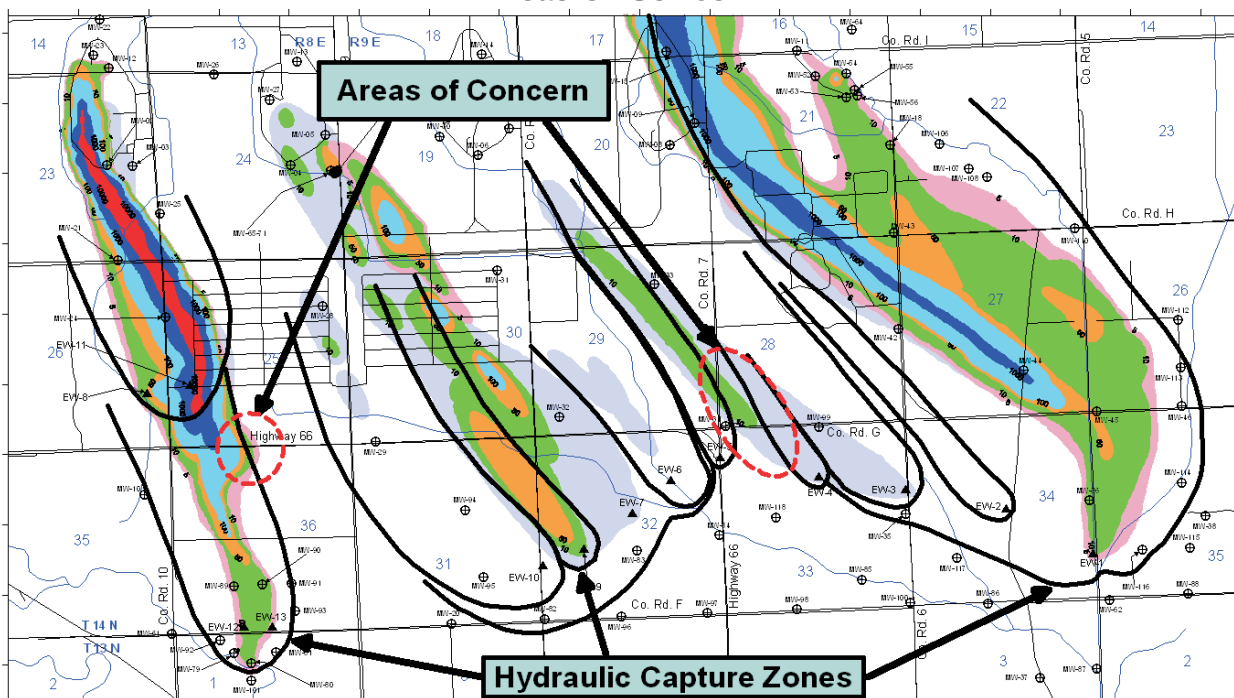
- Continue annual system performance evaluation.
- Continue residential well sampling and alternate water supply support.

Estimated Response Schedule (Dates listed are draft document submittals to EPA/NDEQ)

- Direct-push sampling in the Load Line 1 TCE plume (to be completed by Late 08)
- Remedy selection process for EW-14, EW-15, EW-16 and the new treatment plant (will be completed OCTOBER 08)
- Prepare construction work plans for EW-14, EW-15, EW-16 and the new treatment plant (will be completed OCTOBER 08)
- Implement EW-14, EW-15, EW-16 and the new treatment plant (will be completed OCTOBER 08 - NOVEMBER 09)

The plume depictions presented below represent the maximum extent of TCE and RDX from both the shallow and intermediate zones.

Hydraulic Containment Areas of Concern



Based on 2007 Containment Evaluation.

September 2008